

### **Abstract**

A method and an apparatus are proposed for mixing at least two fluids in a micromixing reactor constructed from a stack of films or thin plates, wherein a mixing chamber extends transverse to the film planes, and the fluids to be mixed are introduced separately and adjacent one another on the film planes transverse to the longitudinal axis of the mixing chamber, so that the mixing of the fluids takes place directly on their introduction into the mixing chamber, and wherein the resulting mixture is tempered at least on a portion of the circumference of the mixing chamber by a tempering means.